

ABSTRACT OF THE DISCLOSURE

Promoting mass storage and a fine structure of each flash memory.

An insulating film for protecting an upper portion of a control gate electrode is constituted by a silicon oxide film, and thereby stress affecting a gate oxide film and a substrate that is located below a bottom portion thereof is reduced. Further, an etching prevention film consisting of a silicon nitride film is formed on a sidewall of the silicon oxide film, and thereby it is possible to prevent the sidewall of the silicon oxide film from being etched in a hydrofluoric acid cleaning step after processing of a gate electrode.